A LABORATORY AID IN THE ISOLATION OF ENTOMOGENOUS FUNGI

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The technique here described was developed to facilitate the preparation of isolation plates of the fungus *Beauveria bassiana* occurring on larvæ and adults of the Japanese beetle. The dead insects, even when presenting the typical external growth of *Beauveria* spores, are heavily contaminated with a variety of other microorganisms and the successful preparation of isolation plates requires that a suspension of discrete cells be made in water. The spores of most entomogenous fungi are wettable by water only with difficulty, and the commonly used method for preparing cell suspensions gives poor results because the mass is not thoroughly dispersed, so that the contaminating organisms are carried along with small aggregates of the desired spores.

An excellent dispersal of individual spores may be prepared by placing a small amount of the fungus growth on a sterile slide together with a small drop of water, and covering this with a sterile micro cover. The cover is then moved about in a more or less rotary fashion by means of a pencil eraser. The disintegration of the mass can be periodically observed under the compound microscope. When it is seen that the spores are thoroughly dispersed the cover glass is removed and the suspension on the slide diluted and pipetted into the usual dilution tubes. Care must be taken that the grinding action between the slide and cover glass is not too long continued or the pressure too great, since the spores are easily crushed or ground and rendered nonviable.